

Abstract

A glass-ceramic composite material is proposed, having a matrix that is at least from place to place of a glass type, and having a ceramic filler as well as a ceramic foil, a ceramic laminate or microhybrid (5) using this composite material, the matrix containing lithium, silicon, aluminum and oxygen, and has at least from place to place a crystalline phase. In addition, a method is proposed for producing it, a glass having crystalline regions being melted from a starting mixture having 20 wt. % to 68 wt. % SiO_2 , 10 wt. % to 25 wt. % Al_2O_3 , 5 wt. % to 20 wt. % LiO_2 , 0 wt. % to 35 wt. % B_2O_3 , 0 wt. % to 10 % P_2O_5 , 0 wt. % to 10 wt. % Sb_2O_3 and 0 wt. % to 3 wt. % ZrO_2 and converted into a glass powder, a ceramic filler, particularly powdered aluminum nitride, being then mixed in with the glass powder, and this powder mixture is finally sintered, especially after the addition of further components.

Figure 1